

Information Technology Service Division (ITSD)



HB14 – Appropriation for IT Projects

NP 727: Statewide E9-1-1 Network

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MT Dept of Admin/ITSD
444-3988



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How E9-1-1 Differs From Interoperability Montana and State Government Data Network Expansion

E9-1-1

Getting the 9-1-1
Emergency Call from
the Public to Responders



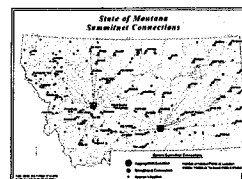
Interoperability Montana (IM) Project

Wireless (radio)
Communications for
Responders in the Field



State Government Data Network Expansion

Increasing the capacity
of State government's
data network



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Outline



- Current Session Legislation & Budget Proposals
- 9-1-1 Overview
- Statewide E9-1-1 Project
 - The early years
 - 2007 and beyond
- HB 14 Proposal: \$4,000,000



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Current Session Legislation & Budget Proposals



- HB14 (Statewide E9-1-1 Network)
 - Subject of today's presentation
 - Completes the project already underway (and under contract)
- HB33 (Revise 9-1-1 emergency phone system laws)
 - Department of Administration bill (Sponsor: Rep. McNutt)
 - Clarifies existing 9-1-1 statute
 - No 9-1-1 fee increase
- HB27 (Establish wireless enhanced 9-1-1 system)
 - Advanced by the Energy & Telecommunications Interim Committee (Sponsor: Rep. Driscoll)
 - Raises monthly 9-1-1 fee from \$.50 to \$1.00
 - \$.25 to 9-1-1 Centers – monthly recurring costs of wireless E9-1-1
 - \$.25 to wireless carriers for costs associated with delivering a enhanced wireless call to the 9-1-1 network



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Montana's 9-1-1 Program



The Basics:

- 9-1-1 fee of \$.50 per phone per month
- 57 Public Safety Answering Points (PSAPs)
 - 9-1-1 Dispatch Centers
- 2 FTE state administrative office
 - Review and approve 9-1-1 plans
 - Distribute the 9-1-1 fee collections to local government
- Total 9-1-1 Fees:
 - FY05: \$5,711,593
 - FY06: \$6,074,507



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9-1-1 Definitions



▪ Basic 9-1-1

A telephone system which automatically connects a person dialing the digits "9-1-1" to an established 9-1-1 Dispatch Center through normal telephone service facilities.



▪ Enhanced 9-1-1

A telephone system that includes selective routing, ANI (Automatic Number Identification) and ALI (Automatic Location Identification)



▪ Wireless Enhanced 9-1-1

Phase I – The 9-1-1 Dispatch Center is provided with the caller's number and cell tower



Phase II – The 9-1-1 Dispatch Center is provided with the caller's number AND the location (via GPS)



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So what's ru'al?



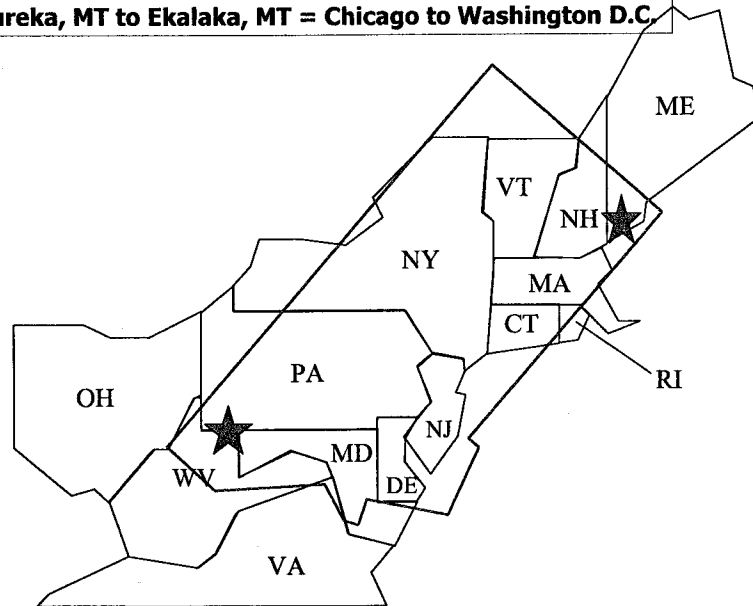
View from North Cut Bank, Montana central office



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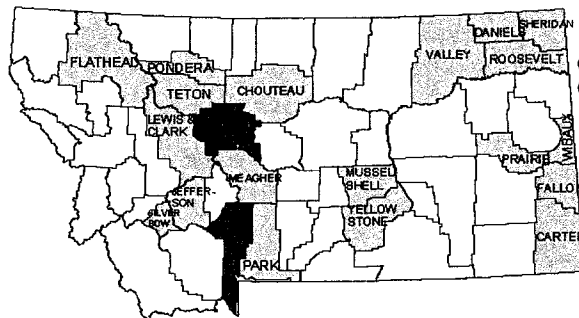
Eureka, MT to Ekalaka, MT = Chicago to Washington D.C.



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9-1-1 Deployment Status: 2004



(Light BLUE: E9-1-1 deployed)
(BLUE: Phase I or II Wireless deployed)

Public Safety Answering Points (PSAPs): 58 (includes joint Counties and City/Town dispatch)

Basic 9-1-1 Service: 100% (landline)

Enhanced 9-1-1: 18 (landline)

Wireless (cell phone) Enhanced 9-1-1 Service:

Phase I: 1 (Gallatin County)

Phase II: 1 (Cascade County)

Total Basic 9-1-1 and E9-1-1 Fees FY 2003: \$ 5,344,008



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The E9-1-1 Deployment Dilemma



Obsolete Technology

- 40 year old architecture
- Limited functionality
- Not set up for cell phones
- Will not handle new features



Insufficient Funding

- \$250,000 per PSAP average deployment cost for land-line E9-1-1
- 40 of 57 9-1-1 Centers dealing with a revenue shortfall to deploy land-line E9-1-1

Bottom Line: 57 PSAPs, pursuing 57 unique deployment strategies, had created a "Have's vs. Have-nots" where only 18 PSAPs had land-line E9-1-1 and only 2 PSAPs had wireless enhanced 9-1-1.



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Statewide E9-1-1 Project



GOAL

Rather than fund dozens of stovepipe systems, the State pursued funding for a uniform and standard E9-1-1 network, thereby reducing overall investment by eliminating duplication.

OBJECTIVE

Eliminate the "have's vs. have-nots"

STRATEGY

- Secure Funding
- Contract for a statewide system



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Summary of Federal & Private (Grant) Funding



Federal Funding			Private (Grant) Funding		
FFY03:	TYPE	AMOUNT	2003:	TYPE	AMOUNT
	E9-1-1	\$1,735,375		Public Safety Foundation Grant	\$ 50,000
	Emergency Notification	\$1,900,000			
FFY06:			2004:		
	E9-1-1	\$ 987,000		PSAP Readiness Fund Grant	\$334,118
TOTAL:		\$4,622,375	TOTAL:		384,118



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Statewide E9-1-1 Project



The statewide E9-1-1 solution provides:

- Fully redundant E9-1-1 network-Phase II
Wireless ready, IP enabled
- Database services
Provides caller telephone number & location
- Statewide emergency notification service
- Outbound 9-1-1 calling for notification
- 9-1-1 call taking equipment



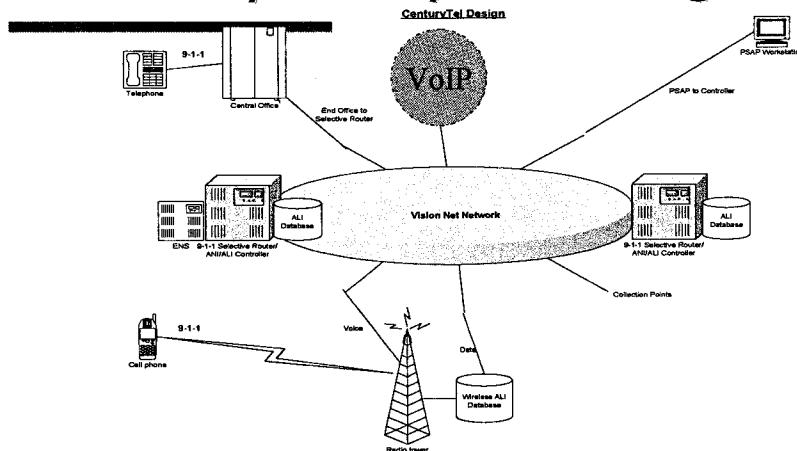
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System Contract: CenturyTel



CenturyTel's System Design



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Telecommunications Network: Vision Net, Inc.

Legend:

- INTERNET PEERING POINT
- EXISTING NODE OR ATM HUB
- FUTURE ATM HUB
- EXISTING DS3 CARRY MODE. SERP
- FUTURE DS3 SERVICE
- COMBINES FIBER HOTEL
- FUTURE COMB. FIBER HOTEL
- VISION NET INC. TV STUDIOS
- MD-BUSINESS RANGE VLS SITES
- EXISTING FIBER OPTICS (UP TO OC-48 CAPACITY)
- FUTURE FIBER OPTICS
- WISDOM TDM 1 INTERNET
- EXISTING INDEPENDENT CO. FIBER OPTICS
- VALLEY TELECOMMUNICATIONS
- FRANKLIN TELEPHONE COOPERATIVE
- BLACKHAWK TELEPHONE COOPERATIVE
- NEWMARK TELEPHONE COOPERATIVE
- SOUTHERN MOUNTAIN COMMUNICATIONS
- SOUTHERN TELEPHONE COOPERATIVE
- UNIVERSITY TELEPHONE COOPERATIVE
- PROJECT TELEPHONE COMPANY
- CLARK RANG. TELECOMMUNICATIONS
- ORIENT COMMUNICATIONS
- WINDHEAD TELEPHONE COOPERATIVE
- WINDHEAD TELEPHONE COOPERATIVE
- SOUTHERN MOUNTAIN TELEPHONE COOPERATIVE
- INTERSTATE TELEPHONE COMPANY
- UNION PAC TELEPHONE COMPANY
- CLARKSON COMMUNICATIONS
- WATKINS TELEPHONE COMPANY
- CLARKSON COMMUNICATIONS
- WEST RIVER CLOPP TELEPHONE COMPANY
- WINDHEAD TELEPHONE COOPERATIVE
- WINDHEAD TELEPHONE COMPANY
- UNASSIGNED AREA

VISION NET, INC. (406) 467-4700
www.montanavision.net

VISION NET

Current Status – Statewide E9-1-1 Project

Status of E9-1-1 Deployment

Basic 9-1-1 Deployment (Land Line Only)

Statewide



Enhanced 9-1-1 Deployment (Land Line Only) – 32 9-1-1 Centers

Blaine, Broadwater, Butte/Silver Bow, Cascade, Central MT, Chouteau, Daniels, Fallon/N. Carter/Wibaux/Prairie, Flathead, Gallatin, Glacier, Hill, Jefferson, Lake, Lewis & Clark, Liberty, Madison, Meagher, Missoula, Musselshell, Park, Pondera, Powell, Ravalli, Roosevelt, Sheridan, Stillwater, Sweetgrass, Valley, West Yellowstone, Wheatland/Golden Valley, Yellowstone

Wireless Enhanced 9-1-1 Deployment – Phase II - 5 9-1-1 Centers

All Phase II: Cascade, Chouteau, Flathead, Gallatin, Missoula, Yellowstone



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Statewide E9-1-1 Network -\$4,000,000



Benefits:

- Provides \$4,000,000 to complete project
- Eliminates the "have nots"
- Eliminates duplication
- Achieve uniformity & standardization
- Reduces initial cost
- Participating 9-1-1 Centers do not spend all their 9-1-1 funds

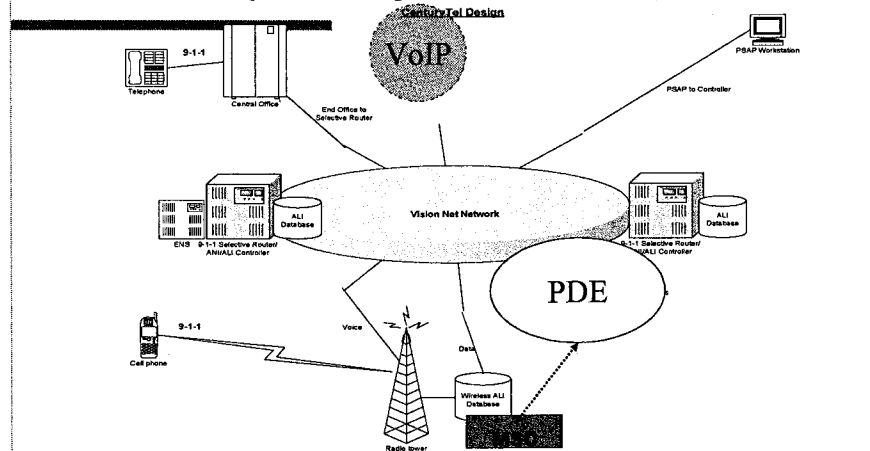


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System Contract: CenturyTel

CenturyTel System Design



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Proposed \$4,000,000 Appropriation



Next step build out of statewide E9-1-1 network

Position Determining Equipment (PDE)	\$1,000,000
Installation, Management, Recurring Costs	\$ 800,000
Project Management	\$ 200,000

Convert 4 9-1-1 Centers to statewide network

Difference in monthly costs	\$ 600,000
One-time costs	\$ 200,000
Project management	\$ 200,000
System development	<u>\$1,000,000</u>

Total request: \$4,000,000



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Questions



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